#### CITY OF TIGARD, OREGON

## ORDINANCE NO. 02-15

AN ORDINANCE AMENDING CHAPTERS 18.775 AND 18.797 OF THE TIGARD MUNICIPAL CODE AND VOLUME II, SECTION 4 OF THE TIGARD COMPREHENSIVE PLAN

WHEREAS, the City currently protects sensitive lands under Chapter 18.775 of the Municipal Code and protects water resources under Chapter 18.797 of the Municipal Code; and

WHEREAS, Chapter 18.775 and 18797 overlap and are not totally consistent; and

WHEREAS, the City is required to comply with Title 3 of the Metro Urban Growth Functional Plan; and

WHEREAS, additional protections of environmentally sensitive areas are needed to ensure a healthy environment; and

WHEREAS, the City Council has determined that Chapter 18.775 and 18.797 should be amended to avoid overlap and inconsistencies and to provide protection for natural resources while protecting private property rights; and

WHEREAS, the City Council has determined that Section 4 of the Tigard Comprehensive Plan, Volume II, should be amended to add Clean Water Services to the list of government entities listed referenced in Water Quality Policy 4.2.1; and

WHEREAS, the Planning Commission held a duly noticed public hearing on November 6, 2000, on the proposed amendments to Chapter 18.775 and 18.797 of the TMC and Section 4 of the Tigard Comprehensive Plan, and voted to forward the changes to the City Council without a recommendation; and

WHEREAS, the City Council held a public hearing on the proposed amendments to Chapter 18.775 and 18.797 on March 26, 2002, and considered comments on the proposed amendments; and

WHEREAS, the amendments are consistent with applicable statewide planning goals and applicable Comprehensive Plan policies, as detailed in the staff report,

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

SECTION 1: The Tigard Municipal Code Chapter 18.775 is amended as shown in Exhibit "A" to this

ordinance.

SECTION 2: The Tigard Municipal Code Chapter 18.797 is amended as shown in Exhibit "B" to this

ordinance.

SECTION 3: The Tigard Comprehensive Plan, Volume II Section 4 is amended as shown in Exhibit

"C" to this ordinance.

SECTION 4:

The findings in support of the amendments contained in the staff report dated November 6, 2000, are adopted by this reference.

**SECTION 5:** 

In the event that a claim for just compensation is made against the City pursuant to Article I, Section 18 of the Oregon Constitution based on the application or enforcement of Municipal Code Chapters 18.775 or 18.797, the City Council may waive, suspend, or modify application or enforcement of those chapters. In the event that the waiver, suspension, or modification results in a state statute or regulation becoming directly applicable, the City will enforce state law as required. In the event that the waiver, suspension, or modification results in any provision of the Metro code becoming directly applicable, the City will enforce the applicable provision of the Metro Code.

SECTION 6:

This ordinance shall be effective 30 days after its passage by the Council, signature by the Mayor, and posting by the City Recorder.

PASSED:

By <u>Unanimous</u> vote of all Council members present after being read by number and title only, this <u>Wett</u>day of <u>Much</u>, 2002.

Catherine Wheatley
Catherine Wheatley, City Recorder

APPROVED:

By Tigard City Council this 24th day of Mach, 2

James E. Griffith, Mayor

Approved as to form;

City Attorney

3.26.02

Date

I/citywide/title3amendments.adoption.ord

## Chapter 18.775 SENSITIVE LANDS

#### Sections:

18.775.010	Purpose
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18.775.030	Administrative Provisions
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18.775.050	General Provisions for Wetlands
18.775.060	<b>Expiration of Approval: Standards for Extension of Time</b>
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18.775.0 <del>90</del> 80	Application Submission Requirements
18.775.090	Special Provisions for Development along the Tualatin River, Fanno Creek, Ball
	Creek, and the South Fork of Ash Creek
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18.775.130	Plan Amendment Option

## **18.775.010** Purpose

- A. <u>Maintain integrity of rivers, streams, and creeks</u>. Sensitive land regulations contained in this chapter are intended to maintain the integrity of the rivers, streams, and creeks in Tigard by minimizing erosion, promoting bank stability, maintaining and enhancing water quality, and fish and wildlife habitats, and preserving scenic quality and recreation potential.
- B. <u>Implement comprehensive plan and floodplain management program</u>. The regulations of this chapter are intended to implement the comprehensive plan and the city's flood plain management program as required by the National Flood Insurance Program, and help to preserve natural sensitive land areas from encroaching use, and to maintain the September 1981 and, where revised, the March 20, 2000, zero-foot rise floodway elevations.
- C. <u>Implement Clean Water Service (CWS) Design and Construction Standards.</u> The regulations of this chapter are intended to protect the beneficial uses of water within the Tualatin River Basin in accordance with the CWS "Design and Construction Standards", as adopted 02/07/00.
- D. Implement the Metro Urban Growth Management Functional Plan. The regulations of this chapter are intended to protect the beneficial water uses and functions and values of resources within water quality and flood management areas and to implement the performance standards of the Metro Urban Growth Management Functional Plan.
- E. <u>Implement Statewide Planning Goal 5 (Natural Resources)</u>. The regulations in this chapter are intended to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule pertaining to wetland and riparian corridors.

- C.F. <u>Protect public health, safety, and welfare</u>. Sensitive land areas are designated as such to protect the public health, safety, and welfare of the community through the regulation of these sensitive land areas.
- D.G. <u>Location</u>. Sensitive lands are lands potentially unsuitable for development because of their location within:
  - 1. The 100-year floodplain or 1996 flood inundation line, whichever is greater;
  - 2. Natural drainageways;
  - 3. Wetland areas which are regulated by the other agencies including the U.S. Army Corps of Engineers and the Division of State Lands, or are designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map City of Tigard "Wetland and Stream Corridors Map"; and
  - 4. Steep slopes of 25% or greater and unstable ground.

## 18.775.020 Applicability of Uses: Permitted, Prohibited, and Nonconforming

- A. <u>CWS Stormwater Connection permit</u>. All proposed "development", must obtain a Stormwater Connection Permit from CWS pursuant to its "Design and Construction Standards". As used in this chapter, the meaning of the word "development" shall be as defined in the CWS "Design and Construction Standards": all human-induced changes to improved or unimproved real property including:
  - 1. Construction of structures requiring a building permit, if such structures are external to existing structures;
  - 2. Land division;
  - 3. Drilling;
  - 4. Site alterations resulting from surface mining or dredging,
  - 5. Grading;
  - 6. Construction of earthen berms;
  - 7. Paving;
  - 8. Excavation; or
  - 9. Clearing when it results in the removal of trees or vegetation which would require a permit from the local jurisdiction or an Oregon Department of Forestry tree removal permit.
  - 10. The following activities are not included in the definition of development:
    - a. Farming activities when conducted in accordance with accepted farming practices as defined

in ORS 30.930 and under a Senate Bill 1010 water quality management plan;

- b. Construction, reconstruction, or modification of a single family residence on an existing lot of record within a subdivision that was approved by the City or County after 09/09/95 (from ORS 92.040(2)); and
- c. Any development activity for which land use approvals have been issued pursuant to a land use application submitted to the City or County on or before 02/04/2000 and deemed complete or before 03/15/00.
- A.B. Outright permitted uses with no permit required. Except as provided below and by Subsections A, D, F and G below, the following uses are outright permitted uses within the 100-year floodplain, drainageways, slopes that are 25% or greater, and unstable ground when the use does not involve paving. For the purposes of this chapter, the word "structure" shall exclude: children's play equipment, picnic tables, sand boxes, grills, basketball hoops and similar recreational equipment.
  - 1. Accessory uses such as lawns, gardens, or play areas; except in (a.) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the "CWS "Design and Construction Standards" or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.90.
  - 2. Farm uses conducted without locating a structure within the sensitive land area; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS "Design and Construction Standards", or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.090.
  - 3. Community recreation uses, excluding structures; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS "Design and Construction Standards", or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.090.
  - 4. Public and private conservation areas for water, soil, open space, forest, and wildlife resources;
  - 5. Removal of poison oak, tansy ragwort, blackberry, English ivy, or other noxious vegetation;
  - 6. Maintenance of floodway excluding re-channeling; except in (a) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS "Design and Construction Standards", or (b) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.090.
  - 7. Fences, except in: (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS "Design and Construction Standards", or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.090.
  - 8. Accessory structures which are less than 120 square feet in size, except in: (a) the floodway area, (b) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS "Design and Construction Standards", or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.090.
  - 9. Land form alterations involving up to 10 cubic yards of material, except in: (a) the floodway area or in (b) a Water Quality Sensitive Area or Vegetated Corridor, as defined in the CWS "Design and Construction Standards", or (c) the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in 18.775.090.

- B C. Exemptions. When performed under the direction of the City, and in compliance with the provisions of the City of Tigard Standards and Specifications for Riparian Area Management, on file in the Engineering Division, the following shall be exempt from the provisions of this section:
  - 1. Responses to public emergencies, including emergency repairs to public facilities;
  - 2. Stream and wetlands restoration and enhancement programs;
  - 3. Non-native vegetation removal;
  - 4. Planting of native plant species; and
  - 5. Routine maintenance or replacement of existing public facilities projects.
- A. Jurisdictional wetlands. Landform alterations or developments which are only within wetland areas that meet the jurisdictional requirements and permit criteria of the U.S. Army Corps of Engineers, Division of State Lands, Unified Sewerage Agency CWS, and/or other federal, state, or regional agencies, and are not designated as significant wetlands on the City of Tigard "Wetland and Streams Corridors Map", do not require a sensitive lands permit. The City shall require that all necessary permits from other agencies are obtained. All other applicable City requirements must be satisfied, including sensitive land permits for areas within the 100-year floodplain, slopes of 25% or greater or unstable ground, drainageways, and wetlands which are not under state or federal jurisdiction.

## C. E. Administrative sensitive lands review.

- 1. Administrative sensitive lands permits in the 100-year floodplain, drainageway, slopes that are 25% or greater, and unstable ground shall be obtained from the appropriate community development division for the following:
  - a. The City Engineer shall review the installation of public support facilities such as underground utilities and construction of roadway improvements including sidewalks, curbs, streetlights, and driveway aprons by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;
  - b. The City Engineer shall review minimal ground disturbance(s) or landform alterations involving 10 to 50 cubic yards of material, except in the floodway area, for land that is within public easements and rights-of-way by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;
  - c. The Director shall review minimal ground disturbance(s) or landform alterations involving 10 to 50 cubic yards of material, except in the floodway area by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;
  - d. The Director shall review the repair, reconstruction, or improvement of an existing structure or utility, the cost of which is less than 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction provided no development occurs in the floodway by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter;

- e. The Building Official shall review building permits for accessory structures which are 120 to 528 square feet in size, except in the floodway area; and
- f. The Director shall review applications for paving on private property, except in the floodway area by means of a Type I procedure, as governed by Section 18.390.030 subject to compliance with all of the standards in this Chapter.
- 2. The responsible community development division shall approve, approve with conditions, or deny an application for a development permit, as described above, based on the standards set forth in sections 18.775.050, 18.775.070, and 18.775.080.

## E.F. Sensitive lands permits issued by the Director.

- 1. The Director shall have the authority to issue a sensitive lands permit in the following areas by means of a Type II procedure, as governed in Section 18.390.040, using approval criteria contained in Section 18.775.070:
  - a. Drainageways;
  - b. Slopes that are 25% or greater or unstable ground; and
  - c. Wetland areas which are not regulated by other local, state, or federal agencies and are designated as significant wetlands on the Comprehensive Plan Floodplain and Wetland Map City of Tigard "Wetland and Streams Corridors Map".
- 2. Sensitive lands permits shall be required for the areas in Section 18.775.020 D1 above when any of the following circumstances apply:
  - a. Ground disturbance(s) or land form alterations involving more than 50 cubic yards of material;
  - b. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction;
  - c. Residential and non-residential structures intended for human habitation; and
  - d. Accessory structures which are greater than 528 square feet in size, outside floodway areas.

## E.G. Sensitive lands permits issued by the Hearings Officer.

- 1. The Hearings Officer shall have the authority to issue a sensitive lands permit in the 100-year floodplain by means of a Type IIIA procedure, as governed by Section 18.390.050, using approval criteria contained in Section 18.775.070.
- 2. Sensitive lands permits shall be required in the 100-year floodplain when any of the following circumstances apply:
  - a. Ground disturbance(s) or landform alterations in all floodway areas;

- b. Ground disturbance(s) or landform alterations in floodway fringe locations involving more than 50 cubic yards of material;
- c. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50 percent of the market value of the structure prior to the improvement or the damage requiring reconstruction provided no development occurs in the floodway;
- d. Structures intended for human habitation; and
- e. Accessory structures which are greater than 528 square feet in size, outside of floodway areas.
- F.H. Other uses. Except as explicitly authorized by other provisions of this chapter, all other uses are prohibited on sensitive land areas.
- G.I. Nonconforming uses. A use established prior to the adoption of this title, which would be prohibited by this Chapter or which would be subject to the limitations and controls imposed by this Chapter, shall be considered a nonconforming use. Nonconforming uses shall be subject to the provisions of Chapter 18.760.

#### 18.775.030 Administrative Provisions

- A. <u>Interagency Coordination</u>. The appropriate approval authority shall review all sensitive lands permit applications to determine that all necessary permits shall be obtained from those federal, state, or local governmental agencies from which prior approval is also required.
  - 1. As governed by CWS "Design and Construction Standards", the necessary permits for all "development", as defined in 18.775.020.A above, shall include a CWS Service Provider Letter, which specifies the conditions and requirements necessary, if any, for an applicant to comply with CWS water quality protection standards and for the Agency to issue a Stormwater Connection Permit.

## B. Alteration or relocation of water course.

- 1. The Director shall notify communities adjacent to the affected area and the State Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration:
- 2. The Director shall require that maintenance is provided within the altered or relocated portion of a watercourse so that the flood-carrying capacity is not diminished.
- C. <u>Apply Standards</u>. The appropriate approval authority shall apply the standards set forth in Sections 18.775.040, and 18.775.070 when reviewing an application for a sensitive lands permit.
- D. <u>Elevation and flood-proofing certification</u>. The appropriate approval authority shall require that the elevations and flood-proofing certification required in Subsection E below be provided prior to occupancy or final approval of all new or substantially improved structures permit issuance and verification upon occupancy and final approval.
- E. Maintenance of records.

- 1. Where base flood elevation data is provided through the Flood Insurance Study, the Building Official shall obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
- 2. For all new or substantially improved flood-proofed structures, the Building Official shall:
  - a. Verify and record the actual elevation (in relation to mean sea level); and
  - b. Maintain the flood-proofing certifications required in this chapter.
- 3. The Director shall maintain for public inspection all other records pertaining to the provisions in this chapter.

## 18.775.040 General Provisions for Floodplain Areas

- A. <u>Permit review</u>. The appropriate approval authority shall review all permit applications to determine whether proposed building sites will be <u>safe from flooding</u> minimize the potential for flood damage.
- B. Special flood hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study of the City of Tigard," dated September 1, 1981, with accompanying Flood Insurance Maps (updated February 1984), is hereby adopted by reference and declared to be a part of this chapter, except where revised by the "Fanno Creek Watershed Flood Insurance Restudy; Final 100-Year Floodplain, Zero-Rise Floodway, and Base Map Elevations; City of Tigard, 3/20/00", which also is hereby adopted by reference and declared to be part of this chapter. These Flood Insurance Studies are on file at the Tigard Civic Center.
- C. <u>Base flood elevation data</u>. When base flood elevation data has not been provided in accordance with Subsection B above, the Director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Subsections M and N below).
- D. <u>Test of reasonableness</u>. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that the potential for flood damage to the proposed construction will be reasonably safe from flooding minimized. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these sensitive land areas may result in higher insurance rates.
- E. <u>Resistant to flood damage</u>. All new construction and substantial improvements, including manufactured homes, shall be constructed with materials and utility equipment resistant to flood damage.
- F. <u>Minimize flood damage</u>. All new construction and substantial improvements, including manufactured homes, shall be constructed using methods and practices that minimize flood damage.
- G. <u>Equipment protection</u>. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

- H. <u>Water Supply Systems</u>. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwater into the system.
- I. <u>Anchoring</u>. All new construction, all manufactured homes and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- J. <u>Sanitary sewerage systems</u>. New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of floodwater into the systems and discharge from the systems into floodwater.
- K. <u>On-site water disposal systems</u>. On-site water disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

## L. Residential Construction.

- 1. New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including the basement, elevated at least one foot above base flood elevation;
- 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or must meet or exceed the following minimum criteria:
  - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
  - b. The bottom of all openings shall be no higher than one foot above grade; and
  - c. Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters.
- Manufactured homes shall be securely anchored to an adequately anchored permanent foundation system. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
- M. <u>Nonresidential Construction</u>. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation, or together with attendant utility and sanitary facilities, shall:
  - 1. Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
  - 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
  - 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this

- subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in Subsection 18.775.030 E2; and
- 4. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in 18.775.040 L2. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).
- N. <u>Subdivisions and partitions in 100-year floodplain</u>. Subdivisions and partitions in the 100-year floodplain shall meet the following criteria:
  - 1. The design shall minimize the potential for flood damage;
  - 2. Public utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed so as to minimize flood damage;
  - 3. Adequate drainage shall be provided to reduce exposure to flood damage; and
  - 4. For subdivisions or partitions which contain more than 50 lots or 5 acres and where base flood elevation data is not available from the Federal Emergency Management Agency (FEMA) or another authoritative source, the applicant shall generate base flood elevation data to be reviewed as part of the application.

#### **18.775.050** General Provisions for Wetlands

- A. Code compliance requirements. Wetland regulations apply to those areas meeting the definition of wetland in Chapter 18.120 of the Community Development Code classified as significant on the City of Tigard Wetland and Streams Corridors Map, areas meeting Division of State Lands wetland criteria and to land adjacent to and within 25 of a wetland and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, per "Table 3.1 Vegetated Corridor Widths" and "Appendix C: Natural Resource Assessments" of the CWS "Design and Construction Standards". Wetland locations may include but are not limited to those areas identified as wetlands in "Wetland Inventory and Assessment for the City of Tigard, Oregon," Fishman Environmental Services, 1994.
- B. <u>Delineation of wetland boundaries</u>. Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant's expense.

## 18.775.060 Expiration of Approval: Standards for Extension of Time

- A. Voiding of permit. Approval of a sensitive lands permit shall be void if:
  - 1. Substantial construction of the approved plan has not begun within a one-and-one-half year period; or
  - 2. Construction on the site is a departure from the approved plan.

- B. <u>Granting of extension</u>. The Director shall, upon written request by the applicant and payment of the required fee, grant an extension of the approval period not to exceed one year, provided that:
  - 1. No changes are made on the original plan as approved by the approval authority;
  - 2. The applicant can show intent of initiating construction of the site within the one year extension period; and
  - 3. There have been no changes to the applicable Comprehensive Plan policies and ordinance provisions on which the approval was based.
- C. <u>Notice of the decision</u>. Notice of the decision shall be provided to the applicant. The Director's decision may be appealed by the applicant as provided by Subsection 18.32.310.A.

#### 18.775.070 Sens itive Land Permits

- A. <u>Permits required.</u> An applicant who wishes to develop within a sensitive area, as defined in Chapter 18.775, must obtain a permit in certain situations. Depending on the nature and intensity of the proposed activity within a sensitive area, either a Type II or Type III permit is required, as delineated in Section 18.775.015 D and E. The approval criteria for various kinds of sensitive areas, e.g., floodplain, are presented in Subsections B E below.
- B. Within the 100-year floodplain. The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:
  - 1. Land form alterations shall preserve or enhance the floodplain storage function and maintenance of the zero-foot rise floodway shall not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge;
  - 2. Land form alterations or developments within the 100-year floodplain shall be allowed only in areas designated as commercial or industrial on the comprehensive plan land use map, except that alterations or developments associated with community recreation uses, utilities, or public support facilities as defined in Chapter 18.130 of the Community Development Code shall be allowed in areas designated residential subject to applicable zoning standards;
  - 3. Where a land form alteration or development is permitted to occur within the floodplain it will not result in any increase in the water surface elevation of the 100-year flood;
  - 4. The land form alteration or development plan includes a pedestrian/bicycle pathway in accordance with the adopted pedestrian/bicycle pathway plan, unless the construction of said pathway is deemed by the Hearings Officer as untimely;
  - 5. The plans for the pedestrian/bicycle pathway indicate that no pathway will be below the elevation of an average annual flood;
  - 6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and CWS permits and approvals shall be obtained; and

- 7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area within and adjacent to the floodplain in accordance with the comprehensive plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian/bicycle pathway plan.
- C. <u>With excessive steep slopes</u>. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit on slopes of 25% or greater or unstable ground based upon findings that all of the following criteria have been satisfied:
  - 1. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use;
  - 2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property;
  - 3. The structures are appropriately sited and designed to ensure structural stability and proper drainage of foundation and crawl space areas for development with any of the following soil conditions: wet/high water table; high shrink-swell capability; compressible/organic; and shallow depth-to-bedrock; and
  - 4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening.
- D. <u>Within drainageways</u>. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit within drainageways based upon findings that all of the following criteria have been satisfied:
  - 1. The extent and nature of the proposed land form alteration or development will not create site disturbances to the an extent greater than that required for the use;
  - 2. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property;
  - 3. The water flow capacity of the drainageway is not decreased;
  - 4. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in accordance with Chapter 18.745, Landscaping and Screening;
  - 5. The drainageway will be replaced by a public facility of adequate size to accommodate maximum flow in accordance with the adopted 1981 Master Drainage Plan;
  - 6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and Clean Water Services approvals shall be obtained;
  - 7. Where land form alterations and/or development are allowed within and adjacent to the 100-year floodplain, the City shall require the consideration of dedication of sufficient open land area

within and adjacent to the floodplain in accordance with the Comprehensive Plan. This area shall include portions of a suitable elevation for the construction of a pedestrian/bicycle pathway within the floodplain in accordance with the adopted pedestrian bicycle pathway plan.

- E. <u>Within wetlands</u>. The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:
  - The proposed land form alteration or development is neither on wetland in an area designated as significant wetland on the Comprehensive Plan Floodplain and Wetland Map nor is within 25 feet of the vegetated corridor established per "Table 3.1 Vegetated Corridor Widths" and "Appendix C: Natural Resource Assessments" of the CWS "Design and Construction Standards", for such a wetland:
  - 2. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use;
  - 3. Any encroachment or change in on-site or off-site drainage which would adversely impact wetland characteristics have been mitigated;
  - 4. Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in accordance with Chapter 18.745, Landscaping and Screening;
  - 5. All other sensitive lands requirements of this chapter have been met;
  - 6. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, Division of State Lands, and Clean Water Services approvals shall be obtained;
  - 6.7. The provisions of Chapter 18.790, Tree Removal, shall be met;
  - 7.8. Physical Limitations and Natural Hazards, Floodplains and Wetlands, Natural Areas, and Parks, Recreation and Open Space policies of the Comprehensive Plan have been satisfied.

#### 18.775.080 Exception for Development of the 108th/113th Ravine below the 140 Feet Elevation

- A. <u>Conditions for development</u>. <u>Under the sensitive lands permit process, the appropriate approval authority, as set forth in Sections 18.775.020 B. and D., may allow portions of the ravine at 108th and 113th, designated as a significant wetlands area, to develop provided that all of the following criteria are met:</u>
- 1. All of the land (within the ravine) being considered for development is less than 25% slope;
- 2. There are no unstable soil conditions on the land being considered for development; and
  - 3. Applicable provisions of Section 18.775.070, sensitive lands approval criteria shall be met.

#### 18.775.09080 Application Submission Requirements

- A. <u>Application submission requirements</u>. All applications for uses and activities identified in Subsections 18.775.020 B-E shall be made on forms provided by the Director and must include the following information in graphic, tabular and/or narrative form. The specific information on each of the following is available from the Director:
  - 1. A CWS Stormwater Connection Permit.
  - 1.2. A site plan;
  - 2-3. A grading plan; and
  - 3. 4. A landscaping plan.

## 18.775.090 Special Provisions for Development within Locally Significant Wetlands and along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek

- A. <u>Safeharbor</u>: In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard Wetland and Streams Corridors Map are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed/approved pursuant to 18.775.130.
- B. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to <u>riparian corridors</u>, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the south fork of Ash Creek.
  - 1. The standard width for "good condition" vegetated corridors along the Tualatin River is 75 feet, unless wider in accordance with CWS Design and Construction Standards, or modified in accordance with 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard Wetlands and Stream Corridors Map) is located within the 75-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.
  - 2. The standard width for "good condition" vegetated corridors along Fanno Creek, Ball Creek, and the south fork of Ash Creek is 50 feet, unless wider in accordance with the CWS Design and Construction Standards, or modified in accordance with 18.775.130. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard Wetlands and Stream Corridors Map) is located within the 50 feet setback area, the vegetated corridor is measured from the upland edge of the associated wetland.
  - 3. The minimum width for "marginal or degraded condition" vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the south fork of Ash Creek is 50% of the standard width, unless wider in accordance with CWS Design and Construction Standards, or modified in accordance with 18.775.130.
  - 4. The determination of corridor condition shall be based on the Natural Resource Assessment guidelines contained in the CWS Design and Construction Standards.

- 5. The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:
  - a. Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the City per 18.775.070 and by CWS per the CWS "Design and Construction Standards";
  - b. Utility/service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the City and CWS;
  - c. A pedestrian or bike path, not exceeding 10 feet in width and meeting the CWS "Design and Construction Standards";
  - d. Grading for the purpose of enhancing the vegetated corridor, as approved by the City and CWS:
  - e. Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;
  - f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the City and CWS;
  - g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are consistent with City and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS "Design and Construction Standards".
- 6. Land form alterations or developments located within or partially within the Goal 5 safeharbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the south fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the Clean Water Services, U.S. Army Corps of Engineers, Division of State Lands, and/or other state federal, state, or regional agencies, are not subject to the provisions of subsection 18.775.090.B, except where the:
  - a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as defined in 18.775.090.B.1 and 2;
  - b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as defined in 18775.090.B.3.

These exceptions reflect instances of the greater protection of riparian corridors provided by the safe harbor provisions of the Goal 5 administrative rule.

## 18.797.110 18.775.100 Adjustments to Underlying Zone Setback Standards

In contrast to variances to the standards of the WR overlay district, Adjustments to dimensional standards of the underlying zone district may be approved by the Planning Director when necessary to further the intent-purpose of this overlay district chapter section.

A. <u>Adjustment option</u>. The Planning Director may approve up to a 50% adjustment to any dimensional standard (e.g., setback, height or lot area) of the underlying zoning district to allow development consistent with the purposes of the <u>WR overlay district chapter this section</u>. The purpose of the adjustment process is to reduce adverse impacts on wetlands, stream corridors, fish and wildlife habitat, water quality and the potential for slope of flood hazards.

- B. Adjustment criteria. A special WR overaly district adjustment to the standards in the underlying zoning district may be requested under Type II procedure when development is proposed within or adjacent to the WR overlay district vegetated corridor area. In order for the Director to approve a dimensional adjustment to standards in the underlying zoning district, the applicant shall demonstrate that all of the following criteria are fully satisfied:
  - 1. The adjustment is the minimum necessary to allow a permitted use, while at the same time minimizing disturbance to a water resource, riparian setback area or water quality buffer.
  - 2. Explicit consideration has been given to maximizing vegetative cover, minimizing excavation and minimizing impervious surface area on unbuildable land.
  - 3. Design options have been considered to reduce the impacts of development, including but not limited to multi-story construction, siting of the residence close to the street to reduce driveway distance, maximizing the use of native landscaping materials, minimizing parking areas and garage space.
  - 4. In no case shall the impervious surface area as a single-family residence (including the building footprint, driveway and parking areas, accessory structures, swimming pools and patios) exceed 3,000 square feet of riparian setback or water quality buffer area a vegetated corridor area.
  - 5. Assurances are in place to guarantee that future development will not encroach further on land under the same ownership within the WR overlay district vegetated corridor area.

The Planning Director may impose any reasonable condition necessary to mitigate identified impacts resulting from development on otherwise unbuildable land.

## 18.797.120 18.775.110 Density Transfer

<u>Density transfer</u>. Density may be transferred from <del>water resource and riparian setback vegetated corridor</del> areas as provided in Section 18.715.020-030.

#### 18.797.130 18.775.120 Variances to Section 18.775.090 Standards

Variances to the use provisions of Section 18.797.050 18.775.090 are not permitted. Variances from measurable (dimensional) provisions of this chapter section shall be discouraged and may be considered only as a last resort.

- A. <u>Type III variance option</u>. The Hearings Officer shall hear and decide variances from dimensional provisions of this chapter under Type III procedure, in accordance with the criteria in Chapter 18.370 of the zoning ordinance.
- B. <u>Additional criteria</u>. In addition tot he general variance criteria described in Chapter 18.370, all of the following additional criteria must be met to grant a variance to any dimensional provision of this chapter:
  - 1. The variance is necessary to allow reasonable economic use of the subject parcel of land, which is owned by the applicant, and which was not created after the effective date of this chapter;

- 2. Strict application of the provisions of this chapter would otherwise result in the loss of a buildable site for a use that is permitted outright in the underlying zoning district, and for which the applicant has submitted a formal application;
- 3. The applicant has exhausted all options available under this chapter to relieve the hardship;
- 4. Based on review of all required studies identical to those described in Section 18.797.060 3.02.5.c Tier 2 Alternatives Analysis of the CWS "Design and Construction Standards", the variance is the minimum necessary to afford relief, considering the potential for increased flood and erosion hazard, and potential adverse impacts on native vegetation, fish and wildlife habitat, and water quality;
- 5. Based on review of all required studies identical to those described in Section 18.797.060 3.02.5 of the CWS "Design and Construction Standards", no significant adverse impacts on water quality, erosion or slope stability will result from approval of this hardship variance, or these impacts have been mitigated to the greatest extent possible;
- 6. Loss of vegetative cover shall be minimized. Any lost vegetative cover shall be replaced on-site, on a 1-to-1 square foot for square foot basis, by native vegetation.

## **18.797.140 18.775.130** Plan Amendment Option

Any owner of property affected by the Goal 5 safehabor (1) protection of significant wetlands and/or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the south fork of Ash Creek may apply for a quasi-judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS stormwater connection permit, which must be addressed separately through an Alternatives Analysis, as described in Section 3.02.5 of the CWS "Design and Construction Standards". The applicant shall demonstrate that such an amendment is justified by either of the following:

- A. <u>ESEE analysis</u>. The applicant may prepare an Environmental, Social, Economic and Energy (ESEE) consequences analysis prepared in accordance with OAR 660-23-040.
  - 1. The analysis shall consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and in comparison with other comparable sites within he Tigard Planning Area;
  - 2. The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;
  - 3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use;
  - 4. The ESEE analysis shall be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis;

- 5. If the application is approved, then the ESEE analysis shall be incorporated by reference into the Tigard Comprehensive Plan, and the Tigard Wetland and Stream Corridor Map shall be amended to remove the site from the inventory.
- B. <u>Determination of "insignificance."</u> In this case, the applicant must demonstrate that the water resource—sensitive area site(s) no longer meet(s) the applicable significance threshold defined by the Goal 5 administrative rule, relative to other comparable resources within the Tigard Planning Area.
  - 1. Significance thresholds are described and applied in the addendum to the City of Tigard Local Wetlands Inventory adopted by reference as part of this chapter.
  - 2. In considering this claim, the Council shall determine that the decline in identified resource values did not result from a violation of this chapter or any other provision of the Tigard Community Development Code.

## CHAPTER 18.797 WATER RESOURCES (WR) OVERLAY DISTRICT

#### **Sections:**

1 <del>8.797.010</del>	<del>-Purpose</del>
1 <del>8.797.020</del>	— Definitions
1 <del>8.797.030</del>	Applicability and Generalized Mapping
1 <del>8.797.040</del>	Exception for Developed Single-Family Residential Subdivision Lots
1 <del>8.797.050</del>	Permitted, Conditional and Prohibited Uses
1 <del>8.797.060</del>	Application Requirements
1 <del>8.797.070</del>	Decision Options and Conditions
1 <del>8.797.080</del>	Development Standards
1 <del>8.797.090</del>	Abutting Lot Area Reductions
1 <del>8.797.100</del>	Riparian Setback Reductions
1 <del>8.797.110</del>	Adjustments to Underlying Zone Setback Standards
1 <del>8.797.120</del>	Density Transfer
1 <del>8.797.130</del>	Variances to Chapter 18.797 Standards
1 <del>8.797.140</del>	Plan Amendment Option

## 18.797.010 **Purpose**

- A. General. The Water Resources (WR) overlay district implements the policies of the Tigard Comprehensive Plan and is intended to resolve conflicts between development and conservation of significant wetlands, streams and riparian corridors identified in the City of Tigard Local Wetlands Inventory. Specifically, this chapter allows reasonable economic use of property while establishing clear and objective standards to: protect significant wetlands and streams; limit development in designated riparian corridors; maintain and enhance water quality; maximize flood storage capacity; preserve native plant cover; minimize streambank erosion; maintain and enhance fish and wildlife habitats; and conserve scenic, recreational and educational values of water resource areas.
- B. <u>Safe harbor</u>. The WR overlay district also meets the requirements of Statewide Planning Goal 5 (Natural Resources) and the "safe harbor" provisions of the Goal 5 administrative rule (OAR 660, Division 23). These provisions require that "significant" wetlands and riparian corridors be mapped and protected.

#### **18.797.020 Definitions**

- A. Definitions. The definitions of OAR 660 23 090(1) are incorporated herein by reference.
  - 1. The "riparian corridor" includes a river or a major stream, associated wetlands, and the "riparian setback" area;
  - The "riparian setback area" is measured horizontally from and parallel to major stream or Tualatin River top of banks, or the edge of an associated wetland (see definition under K.2.), whichever is greater. The riparian setback is the same as the "riparian corridor boundary" in OAR 660 23 090(1)(d).
    - a. The standard Tualatin River riparian setback is 75 feet, unless modified in accordance with this chapter;

- b. The major streams riparian setback is 50 feet, unless modified in accordance with this chapter;
- e. Isolated wetlands and minor streams (including adjacent wetlands) have no riparian setback; however, a 25 foot "water quality buffer" is required under Unified Sewerage Agency (USA) standards adopted and administered by the City of Tigard.
- 3. "Disturbed areas" are identified portions of the riparian setback area that are devoid of vegetation or which are overgrown with non-native or invasive plant species, such as English ivy or Himalayan blackberry. In contrast, identified portions of the riparian setback area that are dominated by native plant species are not disturbed;
- 4. "Mitigation plan" means a detailed plan to compensate for identified adverse impacts on water resources, riparian setback areas or water quality buffers that result from alteration, development, excavation or vegetation removal within the WR overlay district. A mitigation plan must be prepared by recognized experts in fish and wildlife biology, native plants, and hydrological engineering, and (usually) re-planting with native plant species;
- 5. The Tualatin River is mapped as a fish bearing stream by the Oregon Department of Forestry and has an average annual flow of more than 1000 cfs;
- 6. "Major streams" are mapped as "fish bearing streams" by the Oregon Department of Forestry and have an average annual flow less than 1000 cubic feet per second (cfs);
  - a. Major streams in Tigard include Fanno Creek, Ash Creek (except the north fork and other tributary creeks) and Ball Creek;
  - b. In contrast, the Tualatin River, which is also a "fish bearing stream," has an average annual flow of more than 1000 cfs.
- 7. "Minor streams" are not "fish bearing streams" according to Oregon Department of Forestry maps. Minor streams in Tigard include Summer Creek, Derry Dell Creek, Red Rock Creek, North Fork of Ash Creek and certain short tributaries of the Tualatin River;
- 8. "Native plant species" are those listed on the Portland Plant List, which is incorporated by reference into this chapter;
- 9. "Top of bank" usually means a clearly recognizable sharp break in the stream bank. It has the same meaning as "bankfull stage" as defined in OAR 141-85-010(2): It is the stage or elevation at which water overflows the natural banks of streams and begins to inundate the upland. In the absence of physical evidence, the two year recurrence interval flood elevation may be used to approximate the bankfull stage;
- 10. The "Tigard Wetlands and Riparian Corridors Map" identifies all "significant" water resources within the Tigard Planning Area, including the Tualatin River corridor, all major stream corridors, minor streams and isolated wetlands. This generalized, composite map is based on the City of Tigard Local Wetlands Inventory (LWI) prepared by Fishman Environmental Services, 1994, hereby adopted by reference. All water resources identified as significant on the Tigard Wetlands and Riparian Corridors Map meet the Division of State Lands (DSL) definition of a "Locally Significant Wetland;"

- 11. A "Wetland" is an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions;
  - a. A "Significant Wetland" is a wetland, or a significant but non fish bearing stream, which appears on the City of Tigard Wetlands and Riparian Corridors Map;
  - b. An "Associated Wetland" is a significant wetland, all or part of which is (a) within 75 feet of the Tualatin River top of bank
  - , or (b) within 50 feet of any major stream top-of-bank;
  - c. An "Isolated Wetland" is a significant wetland, all of which is located outside of the riparian setback;
  - d. A "Non Significant Wetland" is a wetland that does not meet the Division of State Lands definition of a Locally Significant Wetland and which, therefore, does not appear on the City of Tigard Wetlands and Riparian Corridors Map. Non significant wetlands are not regulated by this chapter, but do require DSL notification under ORS 227.350.

## 18.797.030 Applicability and Generalized Mapping

- A. <u>WR overlay district application.</u> The WR overlay district applies to all significant wetlands and streams, and applicable riparian setback and water quality buffer areas, that appear on the Tigard Wetlands and Stream Corridors Map. The standards and procedures of this chapter:
  - 1. Apply to all development proposed on property located within, or partially within, the WR overlay district;
  - 2. Are in addition to the standards of the underlying zone; and
  - 3. In cases of conflict, supersede the standards of the underlying zone.
- B. The Tigard wetlands and stream corridors map. The Tigard wetlands and stream corridors map identifies, generally, the tops of bank, wetland edges, riparian setbacks and water quality buffers for the following significant water resources:
  - 1. The Tualatin River riparian corridor;
  - 2. Major stream riparian corridors;
  - 3. Minor streams; and
  - 4. Isolated wetlands.
- C. <u>Standard riparian setbacks and USA water quality buffers</u>. The applicant shall be responsible for surveying and mapping the precise location of the top of bank, wetland edge, riparian setback and/or USA water quality buffer at the time of application submittal.
  - 1. The required water quality buffer and riparian setback area shall be retained in one or more parcels that is separate from abutting buildable lots;

2. Table 18.797.1 summaries standard riparian setbacks and water quality buffers that apply to significant water resources within the WR overlay zone;

## TABLE 18.797.1 -RIPARIAN SETBACKS AND WATER QUALITY BUFFERS

SIGNIFICANT WATER RESOURCE TYPE	WR STANDARD RIPARIAN SETBACK1	USA STANDARD WATER QUALITY BUFFER2
Tualatin River & associated wetlands	75 feet	25 feet
Major streams & associated wetlands	50 feet	25 feet
Developed subdivision lot exception (major streams & associated wetlands)	25 feet	25 feet
Minor streams & adjacent/isolated wetlands	Not applicable	25 feet

<sup>1</sup> Measured in feet from the top-of-bank or the associated wetland edge, whichever is greater.

- Adjustments to these boundaries may be approved pursuant to Sections 18.797.140, 18.797.100, 18.797.130 and/or 18.797.140.
- D. <u>Division of State Lands notification required.</u> In addition to the restrictions and requirements of this Section, all proposed development activities within any wetland are also subject to Oregon Division of State Lands (DSL) standards and approval. Where there is a difference, the more restrictive regulation shall apply. The applicant shall be responsible for notifying DSL whenever any portion of any wetland is proposed for development, in accordance with ORS 227.350. No application for development will be accepted as complete until documentation of such notification is provided.
- E. <u>Unified Sewerage Agency standards applicable</u>. All development activities proposed within 25 feet of any wetland or stream are subject to USA standards and approval.

#### 18.797.040 Exception for Developed Single-Family Residential Subdivision Lots

Tigard has many approved residential subdivisions, where the side or rear yards have been cleared of riparian vegetation, and developed or planted in lawns.

- A. <u>Method of identifying developed subdivision lots.</u> Developed subdivision lots were identified based on a comprehensive analysis of aerial photographs.
- B. <u>25 Foot riparian setback applicable.</u> The Tigard Wetlands & Stream Corridors Map shows a 25 foot riparian setback for developed subdivision lots, because:
  - 1. Water resource values have already been substantially degraded, and maintenance of the 50 foot riparian setback would not serve the purposes of this chapter; and
  - 2. Equal protection of the identified major stream resource is ensured by retaining a 25 foot riparian setback and reliance on the USA maximum water quality buffer.

<sup>2</sup>-Measured in feet from the stream top-of-bank or the wetland edge, whichever is greater.

C. <u>Type I review procedure.</u> The location of structures on identified developed subdivision lots shall be approved under Type I procedure, provided that such structures are located at least 25 feet from the top of bank or the associated wetland edge.

#### 18.797.050 Permitted, Conditional and Prohibited Uses

- A. <u>DSL approval required.</u> Development proposed within any wetland or stream, in addition to meeting the standards of this chapter, shall also be approved by DSL.
- B. <u>USA buffer standards applicable</u>. Development proposed within 25 feet of any wetland or stream shall also be approved by the City, which administers USA standards. Compliance with USA/City standards is necessary but not sufficient for compliance with this chapter.

## [relocated to 18.775.20.C]

- C. <u>City of Tigard exemption.</u> When performed under the direction of the City, and in compliance with the provisions of the City of Tigard Standards and Specifications for Riparian Area Management, on file in the Engineering Division, the following shall be exempt from the provisions of this chapter:
  - 1. Public emergencies, including emergency repairs to public facilities;
  - 2. Stream and wetlands restoration and enhancement programs;
  - 3. Non-native vegetation removal;
  - 4. Planting of native plant species; and
  - Routine maintenance or replacement of existing public facilities projects.
- D. Permitted and conditional uses. Table 18.797.2 below summarizes permitted, conditional and prohibited uses within the WR district. A "Yes" indicates that the use is permitted in the case of Type I uses, is allowed under prescribed conditions in the case of Type II uses, or may be approved subject to discretionary criteria under Type III standards (for descriptions of Type I, II and III see 18.797.060. A "No" indicates that the use is not permitted. A use that is not permitted may not be approved through the variance provisions of this chapter.

## TABLE 18.797.2 WATER RESOURCES OVERLAY DISTRICT USE LIST

#### REGULATED ACTIVITY & PROCEDURE TYPE **Type I -- Permitted Uses with Mitigation Riparian Minor Streams Mitigation Plan** Setback Area Isolated Wetlands Required? Yes Yes No Determination of Water Resource and Riparian Setback boundaries Low impact, passive, or water related recreation Yes No No facilities and trails including, but not limited to, viewing shelters, picnic tables, nature trails and interpretive signs Yes Yes No -Irrigation pumps Yes Yes No -Replacement of existing structures with new structures that do not disturb any additional riparian e) Removal of non-native vegetation and replacement Yes Yes Yes with native plant species, no closer than 10' from the top-of-bank or edge of wetland Yes Yes No Removal of vegetation necessary for hazard prevention (dangerous trees) Perimeter mowing of existing cultivated lawns Yes Yes No -Canoe and non-motorized boat launches less than Yes No No 10' in width Repair and maintenance of existing facilities Yes Ves No **Minor Streams Mitigation Plan Type II Permitted Uses with Mitigation** Riparian where no reasonable alternative exists Setback Area Isolated Wetlands Required? Adjustments to numeric standards of the Yes Yes Yes underlying zone necessary to reduce impacts on wetlands and streams Not applicable b) Reduction in Riparian Setback boundary Ves Ves Public facilities that appear on the City's Ves Ves Yes Public Facilities Plan Local streets and driveways serving residences Yes Yes Ves

and public facilities

SE Update: 01/00

<del>e)</del>	Underground public drainage facilities	Yes	Yes	<del>Yes</del>
f)	Utility crossings	Yes	Yes	Yes
<del>g)</del>	Underground utilities	Yes	Yes	Yes
h)	In stream and streambank enhancement, including vegetation removal and replacement within 10 feet of the top of bank or edge of wetland	Yes	Yes	¥es
<del>i)</del>	Bridges and boardwalks	Yes	Yes	Yes
3.	Type III Conditional Uses	<del>Riparian</del> <del>Setback Area</del>	Minor Streams Isolated Wetlands	Mitigation Plan Required?
a)	Hardship Variances, subject to variance provisions of Chapter 18.370	Yes	Yes	Yes
b)	Water related and water dependent uses not listed above, subject to conditional use provisions of Chapter 18.330	Yes	No No	Yes
4.	Prohibited Uses - unless, specifically authorized above	<del>Riparian</del> <del>Setback Area</del>	Minor Streams Isolated Wetlands	Mitigation Plan Required?
<del>a)</del>	Removal of native plant species	No	<del>No</del>	Not applicable
b)	Placement of structures or impervious surfaces	No	No	Not applicable
e)	Grading and placement of fill	No	No	Not applicable
<del>d)</del>	Application of herbicides	No	No	Not applicable
e)	Dumping of garbage or lawn debris or other unauthorized materials	No No	No	Not applicable
f)	Creation of a parcel that would be wholly	No	No	Not applicable

SE Update: 01/00

#### 18.797.060 Application Requirements

All development applications on lots within, or partially within, the WR overlay district shall submit the following information, in addition to other information required by this code.

- A. <u>Type I uses</u>. The applicant shall prepare a plan that demonstrates that the use will be constructed and located so as to minimize grading, native vegetation removal, and the area necessary for the use. The Director may require additional information where necessary to determine WR district boundaries or to mitigate identified impacts from a proposed development, including but not limited to:
  - 1. Site survey as prescribed in Section 18.797.060B;
  - 2. One or more of the reports described in Section 18.797.060D.
- B. Type II and III uses: site specific survey required. If any Type II or III use or activity is proposed within a water resource, riparian setback or water quality buffer area, the applicant shall be responsible for preparing a survey of the entire site that precisely maps and delineates the following:
  - 1. The name, location and dimensions of significant minor streams (including adjacent wetlands), major streams or rivers (including associated wetlands), and the tops of their respective streambanks or wetland edges;
  - 2. Isolated wetlands;
  - 3. The area enclosed by the riparian setback;
  - 4. The area enclosed by the USA water quality buffer;
  - 5. Steeply sloped areas where the slope of the land is 20% or greater;
  - 6. Existing public rights of way, structures, roads and utilities;
  - 7. Vegetation, including trees or tree clusters and understory;
  - 8. Existing and proposed contours at 2-foot intervals.
- C. <u>Site specific water resource and riparian setback determinations.</u> The required survey of identified water resources and their respective riparian setbacks and water quality buffers, required by Section 18.797.060B, shall serve as the basis for refining the Tigard Wetlands and Stream Corridors Map.
  - 1. The determination of the location of water resources, riparian setbacks and water quality buffers shall be made under Type I procedure;
  - If excavation, vegetation removal or development is proposed completely outside of a water resource, riparian setback or water quality buffer, no further WR overlay zone requirements apply;
  - 3. Permitted and conditional uses within surveyed riparian setback areas are limited to those described in Section 18.797.050 and subject to the development standards of this chapter.

- D. Type II and III uses: required studies and mitigation reports. Each of the following studies shall be required whenever any Type II or III use is proposed within the WR overlay district. Each required report must consider the City of Tigard Local Wetlands Inventory (Fishman Environmental Services, 1994), shall be in addition to the submission of information required for specific types of development, and shall be prepared by professionals in their respective fields. The Planning Director may exempt permit applications from one or more of these studies, based on specific findings as to why the study is unnecessary to determine compliance with this chapter. This determination must be made, in writing, at or immediately following the required pre application conference and prior to application submittal.
  - 1. Hydrology and soils report. This report shall include information on the hydrological activities of the site, the effect of hydrologic conditions on the proposed development, and any hydrological or erosion hazards. This report shall also include soils characteristics of the site, their suitability for development, and erosion or slumping characteristics that might present a hazard to life and property, or adversely affect the use or stability of a public facility or utility. Finally, this report shall include information on the nature, distribution and strength of existing soils, the adequacy of the site for development purposes, and an assessment of grading procedures required to impose the minimum disturbance to the natural state. The report shall include recommendations to assure compliance with each applicable provision of this code as well as all applicable provisions of City building ordinances, and shall be prepared by a professional engineer registered in Oregon;
  - 2. Grading plan. The grading plan shall be specific to a proposed physical structure or use and shall include information on terrain (two foot intervals of property), drainage, direction of drainage flow, location of proposed structures and existing structures which may be affected by the proposed grading operations, water quality facilities, finished contours or elevations, including all cut and fill slopes and proposed drainage channels. Project designs including but not limited to locations of surface and subsurface devices, walls, dams, sediment basins, storage reservoirs, and other protective devices shall form part of the submission. The grading plan shall also include a construction phased erosion control plan consistent with the provisions of this code and a schedule of operations and shall be prepared by a professional engineer registered in Oregon;
  - 3. Vegetation report. This report shall consist of a survey of existing vegetative cover, whether it is native or introduced, and how it will be altered by the proposed development. The report shall specifically identify disturbed areas (i.e., areas devoid of vegetation or areas that are dominated by non native or invasive species) and the percentage of crown cover. Where a reduction in the riparian setback is proposed, measures for re vegetation and enhancement with native plant species will be clearly stated. The vegetation report shall include recommendations to assure compliance with each applicable provision of this code, and shall be prepared by a landscape architect, landscape designer, botanist, arborist, or other qualified individual with specific knowledge of native plant species, planting and maintenance methods, survival rates, and their ability to enhance fish and wildlife habitat and to control erosion and sedimentation;
  - 4. Streambank conditions report. This report is only necessary if a reduction in the riparian setback area is proposed. The streambank conditions report shall consist of a survey of existing streambank conditions, including types of vegetative cover, the extent to which the streambank has been eroded, and the extent to which mitigation measures would be successful in maximizing fish and wildlife habitat values while serving the stream's urban hydrological function. Measures for improving fish and wildlife habitat and improving water quality will be clearly stated, as well as methods for immediate and long term streambank stabilization. The streambank conditions report shall include recommendations to assure compliance with each applicable provision of this code, and shall be prepared by a biologist, or other qualified individual in concert with an

engineer registered in Oregon, both of whom must have experience in stream bank restoration. The report shall specify long term maintenance measures necessary to carry out the proposed mitigation plan.

## 18.797.070 Decision Options and Conditions

- A. <u>Decision options</u>. The Approval Authority may approve, approve with conditions, or deny an application based on the provisions of this chapter. The Approval Authority may require conditions necessary to comply with the intent and provisions of this chapter.
- B. <u>Conditions</u>. The required reports shall include design standards and recommendations necessary for the engineer and biologist or other qualified individual to provide reasonable assurance that the standards of this section can be met with appropriate mitigation measures. These measures, along with staff recommendations, shall be incorporated as conditions into the final decision approving the proposed development.
- C. <u>Assurances and penalties.</u> Assurances and penalties for failure to comply with mitigation, engineering, erosion and water quality plans required under this section shall be as stated in Chapter 18.230.

## 18.797.080 Development Standards

The following shall apply to all development, including native vegetation removal and excavation, within the WR overlay district. No application for a use identified in Section 18.797.050 shall be deemed complete until the applicant has addressed each of these standards in writing.

- A. <u>Alternatives considered.</u> Except for stream corridor enhancement, most Type II and III uses are expected to develop outside of water resource and riparian setback areas. Therefore, Type II and III development applications must carefully examine upland alternatives for the proposed use, and explain the reasons why the proposed development cannot reasonably occur outside of the water resource or riparian setback area.
- B. <u>Minimize siting impacts</u>. The proposed use shall be designed, located and constructed to minimize excavation, loss of native vegetation, erosion, and adverse hydrological impacts on water resources.
  - 1. For Type II and III uses, the civil engineer with experience in water quality must certify that any adverse water quality impacts of the development proposal will be minimized consistent with best management practices;
  - 2. For all uses, the development shall be located as far from the water resource, and use as little of the water resource or riparian setback area, as possible, recognizing the operational needs of the proposed development.
- C. <u>Construction materials and methods</u>. Where development within the riparian area is unavoidable, construction materials or methods used within the riparian setback area shall minimize damage to water quality and native vegetation.
- D. <u>Minimize flood damage</u>. Above ground residential structures shall not be permitted within the WR overlay district, where such land is also within the 100 year floodplain. On site flood storage capacity shall not decrease as a result of development. The cumulative effects of any proposed development shall not reduce flood storage capacity or raise base flood elevations on or off site.

- Any new commercial or industrial land development proposed within the 100 year floodplain shall be designed consistent with Chapter 18.775, Sensitive Lands.
- E. Avoid steep slopes. Within 50 feet of any water resource, excavation and vegetation removal shall be avoided on slopes of 25% or greater and in areas with high erosion potential (as shown on SCS maps), except where necessary to construct public facilities or to ensure slope stability.
- F. <u>Minimize impacts on existing vegetation</u>. The following standards shall apply when construction activity is proposed in areas where vegetation is to be preserved.
  - 1. Temporary measures used for initial erosion control shall not be left in place permanently;
  - Work areas on the immediate site shall be carefully identified and marked to reduce potential damage to trees and vegetation;
  - Trees shall not be used as anchors for stabilizing working equipment. During clearing operations, trees and vegetation shall not be permitted to fall or be placed outside the work area;
  - 4. In areas designated for selective cutting or clearing, care in falling and removing trees and brush shall be taken to avoid injuring trees and shrubs to be left in place;
  - 5. Stockpiling of soil, or soil mixed with vegetation, shall not be permitted on a permanent basis.
- G. <u>Vegetation mitigation plan.</u> If a Type II or III use is proposed within a water resource site or riparian setback area, or mitigation is proposed as a method to reduce the riparian setback in accordance with Section 18.797.100, a mitigation plan shall be prepared and implemented.
  - 1. The applicant shall be responsible for re-vegetating areas temporarily disturbed by excavation on a 1:1 basis;
  - 2. Where approval is granted to reduce the riparian setback area, the applicant shall be responsible for mitigating for the reduced setback by replacing non native vegetation within the remaining, protected riparian setback area on a 1.5:1 basis. That is, for each 100 square feet of riparian setback that is lost to development, at least 150 square feet of existing disturbed area within the riparian setback or wetland shall be re-planted with native plant species;
  - 3. The re vegetation plan shall provide for the replanting and maintenance of native plant species designed to achieve pre disturbance conditions. The applicant shall be responsible for replacing any native plant species that do not survive the first two years after planting, and for ensuring the survival of any replacement plants for an additional two years after their replacement.
- H. <u>Water and sewer infiltration and discharge</u>. Water and sanitary sewer facilities shall be designed, located and constructed to avoid infiltration of floodwaters into the system, and to avoid discharges from such facilities to streams and wetlands.
- I. On site systems. On site septic systems and private wells shall be prohibited within the WR overlay district.
- J. <u>Erosion control plan.</u> If a Type II or III use is proposed within a water resource site or riparian setback area, the following erosion control standards shall apply within the WR overlay district:

minimize visible and measurable erosion: 2. The land area to be grubbed, stripped, used for temporary placement of soil, or to otherwise expose soil shall be confined to the immediate construction site only; 3. Construction activity will take place during the dry season (June October), whenever feasible, and the duration of exposure of soils shall be kept to a minimum during construction; Exposed soils shall be covered by mulch, sheeting, temporary seeding or other suitable material following grading or construction, until soils are stabilized. During the rainy season (November through May), soils shall not be exposed for more than 7 calendar days. All disturbed land areas which will remain unworked for 21 days or more during construction, shall be mulched and seeded; -During construction, runoff from the site shall be controlled, and increased runoff and sediment resulting from soil disturbance shall be retained on site. Temporary diversions, sediment basins, barriers, check dams, or other methods shall be provided as necessary to hold sediment and runoff: A stabilized pad of gravel shall be constructed at all entrances and exists to the construction site. The stabilized gravel pad shall be the only allowable entrance or exit to the site; 7. Topsoil removal for development shall be stockpiled and reused on site to the degree necessary to restore disturbed areas to their original or enhanced condition, or to assure sufficient stable topsoil for re-vegetation. Additional soil shall be provided if necessary to support re-vegetation; 8. The removal of all sediments which are carried into the streets, water resources or on to adjacent property, are the responsibility of the applicant. The applicant shall be responsible for cleaning up and repairing streets, catch basins, water resource areas and adjacent properties, where such properties are affected by sediments or mud. In no case shall sediments be washed into storm drains, ditches or drainageways; Any other relevant provisions of the Erosion Prevention and Sediment Control Plans Technical Guidance Handbook (City of Portland Bureau of Environmental Services and Unified Sewerage Agency of Washington County, Revised February 1994), required by the Planning Director. Plan implementation. A schedule of planned erosion control and re vegetation measures shall be provided, which sets forth the progress of construction activities, and mitigating erosion control measures. An approved Erosion Control of Re vegetation Plan shall be implemented and maintained as follows: 1. Erosion control measures shall be installed prior to any stripping or excavation work. The applicant shall implement the measures and construct facilities contained in the approved Erosion Control Plan in a timely manner. During active construction, the applicant shall inspect erosion control measures daily, and maintain, adjust, repair or replace erosion control measures to ensure that they are functioning properly. Eroded sediment shall be removed immediately from pavement surfaces, off site areas, and from

1. Specific methods of soil erosion and sediment control shall be used during construction to

the surface water management system, including storm drainage inlets, ditches and culverts.

Water containing sediment shall not be flushed into the surface water management system, wetlands or streams without first passing through an approved sediment filtering facility or <del>device.</del> 5. In addition, the applicant shall call for City inspection, prior to the foundation inspection for any building, to certify that erosion control measures are installed in accordance with the erosion control plan. L. Type III conditional uses. The procedural and substantive provisions of Chapter 18.330, Conditional Uses, in addition to Section 18.797.080 L1 2 below and 18.797.080 A K above, shall apply to determine whether a Type III use listed below may be approved. The applicant for conditional use approval shall: 1. Demonstrate that there will not be any net loss in the values of the resource area; and 2. Submit a detailed mitigation plan to show that any loss of riparian values will be fully compensated through the enhancement program. 18.797.090 **Abutting Lot Area Reductions** A. With no riparian setback. Where no riparian setback reduction is proposed, the minimum lot area of buildable lots abutting the riparian setback area may be reduced in proportion to the preserved riparian area outside the required water quality buffer, provided that each abutting lot shall have a minimum depth of at least 60 feet. 18.797.100 **Riparian Setback Reductions** The Director may approve a site specific reduction of the Tualatin River or any major stream riparian setback by as much as 50% to allow the placement of structures or impervious surfaces otherwise prohibited by this chapter, provided that equal or better protection for identified major stream resources is ensured through streambank restoration and/or enhancement of riparian vegetation in preserved portions of the riparian setback area. A. Eligibility for riparian setback in disturbed areas. To be eligible for a riparian setback reduction, the applicant must demonstrate that the riparian corridor was substantially disturbed at the time this regulation was adopted. This determination must be based on the Vegetation Study required by Section 18.797.050 that demonstrates all of the following: 1. Native plant species currently cover less than 80% of the on site riparian corridor area; 2. The tree canopy currently covers less than 50% of the on site riparian corridor and healthy trees have not been removed from the on-site riparian setback area for the last five years; 3. That vegetation was not removed contrary to the provisions of Section 18.797.050 regulating removal of native plant species;

4. That there will be no infringement into the 100 year floodplain; and

5. The average slope of the riparian area is not greater than 20%.

- B. <u>Determination of extent of riparian setback reduction</u>. Provided that the standards of 18.797.080B are met, as much as 50% of the riparian area may be developed, based on a vegetation enhancement and streambank mitigation plan, and subject to the following standards:
  - 1. The minimum remaining riparian setback for the Tualatin River shall not be less than 37.5 feet, and the minimum remaining major stream riparian setback shall not be less than 25 feet.
  - 2. Based on the recommendations of the required vegetation report, up to a 33% reduction in the riparian setback area may be approved, provided that the applicant enhances disturbed portions of the remaining riparian setback area on a 1.5:1 basis. The vegetation report identifies disturbed areas (non vegetated areas and areas that are overgrown with non native or invasive plant species such as English ivy or Himalayan blackberry) and areas dominated by native plant species. Thus, for every 100 square feet of riparian setback area that is developed, at least 150 square feet of the disturbed portion of the remaining riparian setback area must be replanted with native plant species. In this manner, up to a one third riparian setback reduction may be approved.
  - 3. Up to an additional 17% reduction of the riparian setback area may be approved, based on an approved streambank mitigation plan prepared by a biologist and an engineer, both of whom must have experience in stream bank restoration. The plan must demonstrate that the streambank mitigation measures will maximize fish and wildlife habitat values and water quality.

## [relocated with minor modifications to 18.775.100]

## 18.797.110 Adjustments to Underlying Zone Setback Standards

In contrast to variances to the standards of the WR overlay district, adjustments to dimensional standards of the underlying zone district may be approved by the Planning Director when necessary to further the intent of this overlay district.

- A. Adjustment option. The Planning Director may approve up to a 50% adjustment to any dimensional standard (e.g., setback, height or lot area) of the underlying zoning district to allow development consistent with the purposes of the WR overlay district. The purpose of the adjustment process is to reduce adverse impacts on wetlands, stream corridors, fish and wildlife habitat, water quality and the potential for slope of flood hazards.
- B. Adjustment criteria. A special WR overlay district adjustment may be requested under Type II procedure when development is proposed within or adjacent to the WR overlay district. In order for the Director to approve a dimensional adjustment to standards in the underlying zoning district, the applicant shall demonstrate that the following criteria are fully satisfied:
- 1. The adjustment is the minimum necessary to allow a permitted use, while at the same time minimizing disturbance to a water resource, riparian setback area or water quality buffer.
- 2. Explicit consideration has been given to maximizing vegetative cover, minimizing excavation and minimizing impervious surface area on unbuildable land.
- 3. Design options have been considered to reduce the impacts of development, including but not limited to multi story construction, siting of the residence close to the street to reduce driveway distance, maximizing the use of native landscaping materials, minimizing parking areas and garage space.

- 4. In no case shall the impervious surface area os a single family residence (including the building footprint, driveway and parking areas, accessory structures, swimming pools and patios) exceed 3,000 square feet of riparian setback or water quality buffer area.
- 5. Assurances are in place to guarantee that future development will not encroach further on land under the same ownership within the WR overlay district.

The Planning Director may impose any reasonable condition necessary to mitigate identified impacts resulting from development on otherwise unbuildable land.

## [relocated with minor modifications to 18.775.110]

## 18.797.120 Density Transfer

<u>Density transfer</u>. Density may be transferred from water resource and riparian setback areas as provided in Section 18.715.020 030.

## [relocated with minor modifications to 18.775.120]

## 18.797.130 Variances to Chapter 18.797 Standards

Variances to the use provisions of Section 18.797.050 are not permitted. Variances from measurable (dimensional) provisions of this chapter shall be discouraged and may be considered only as a last resort.

- A. <u>Type III variance option</u>. The Hearings Officer shall hear and decide variances from dimensional provisions of this chapter under Type III procedure, in accordance with the criteria in Chapter 18.370 of the zoning ordinance.
- B. Additional criteria. In addition tot he general variance criteria described in Chapter 18.370, all of the following additional criteria must be met to grant a variance to any dimensional provision of this chapter:
- The variance is necessary to allow reasonable economic use of the subject parcel of land, which is owned by the applicant, and which was not created after the effective date of this chapter;
- 2. Strict application of the provisions of this chapter would otherwise result in the loss of a buildable site for a use that is permitted outright in the underlying zoning district, and for which the applicant has submitted a formal application;
- 3. The applicant has exhausted all options available under this chapter to relieve the hardship;
- 4. Based on review of all required studies described in Section 18.797.060, the variance is the minimum necessary to afford relief, considering the potential for increased flood and erosion hazard, and potential adverse impacts on native vegetation, fish and wildlife habitat, and water quality;
  - 5. Based on review of all required studies described in Section 18.797.060, no significant adverse impacts on water quality, erosion or slope stability will result from approval of this hardship variance, or these impacts have been mitigated to the greatest extent possible;

6. Loss of vegetative cover shall be minimized. Any lost vegetative cover shall be replaced on site, on a 1-to 1 basis, by native vegetation.

## [relocated with minor modifications to 18.775.130]

#### 18.797.140 Plan Amendment Option

Any owner of property affected by the WR district may apply for a quasi judicial comprehensive plan amendment under Type IV procedure. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove WR overlay district from the property. The applicant shall demonstrate that such an amendment is justified by either of the following:

- A. <u>ESEE analysis</u>. The applicant may prepare an Environmental, Social, Economic and Energy (ESEE) consequences analysis prepared in accordance with OAR 660-23-040.
- The analysis shall consider the ESEE consequences of allowing the proposed conflicting use fully, consider both impacts on the specific resource site in comparison with other comparable sites within he Tigard Planning Area;
- 2. The ESEE analysis must demonstrate to the satisfaction of the Tigard City Council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;
- 3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning area that can meet the specific needs of the proposed use;
- 4. The ESEE analysis shall be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis;
- 5. If the application is approved, then the ESEE analysis shall be incorporated by reference into the Tigard Comprehensive Plan, and the Tigard Wetland and Stream Corridor Map shall be amended to remove the site from the inventory.
- B. <u>Determination of "insignificance."</u> In this case, the applicant must demonstrate that the water resource site(s) no longer meet(s) the applicable significance threshold defined by the Goal 5 administrative rule, relative to other comparable resources within the Tigard Planning Area.
- 1. Significance thresholds are described and applied in the addendum to the City of Tigard Local Wetlands Inventory adopted by reference as part of this chapter.
- 2. In considering this claim, the Council shall determine that the decline in identified resource values did not result from a violation of this chapter or any other provision of the Tigard Community Development Code.

## TIGARD COMPREHENSIVE PLAN

# Findings, Policies, & Implementation Strategies Volume II

## 4. AIR, WATER AND LAND RESOURCES QUALITY

.... Specifically impacting Tigard is the Metropolitan Service District (MSD) Metro

#### POLICY

#### 4.1.1 THE CITY SHALL:

- a. MAINTAIN AND IMPROVE THE QUALITY OF TIGARD'S AIR QUALITY AND COORDINATE WITH OTHER JURISDICTIONS AND AGENCIES TO REDUCE AIR POLLUTIONS WITHIN THE PORTLAND-VANCOUVER AIR QUALITY MAINTENANCE AREA. (AQMA).
- b. WHERE APPLICABLE, REQUIRE A STATEMENT FROM THE APPROPRIATE AGENCY, THAT ALL APPLICABLE STANDARDS CAN BE MET, PRIOR TO THE APPROVAL OF A LAND USE PROPOSAL.
- c. APPLY THE MEASURES DESCRIBED IN THE DEQ HANDBOOK FOR "ENVIRONMENTAL QUALITY ELEMENTS OF OREGON LOCAL COMPREHENSIVE LAND USE PLANS" TO LAND USE DECISIONS HAVING THE POTENTIAL TO AFFECT AIR QUALITY.

#### **IMPLEMENTATION STRATEGIES**

- 1. The City shall coordinate with MSD Metro and DEQ to attain and maintain the air quality goal described in the State Implementation Plan (SIP).
- 2. The City shall continue to utilize expertise available at the Department of Environmental Quality, the Metropolitan Service District Metro, and other relevant agencies, to coordinate efforts aimed at reducing air pollution emission levels in the Tigard and entire Portland Metropolitan Area.
- 3. Until such time as control strategies are realized, the City of Tigard shall use measures described in the DEQ Handbook for "Environmental Quality Elements of Oregon Local Comprehensive Land Use Plans" when planning any development activities having the potential to directly (by direct emissions) or indirectly (by increasing vehicular travel) affect air quality.
- 4. The City shall make every effort to design municipal streets and roadways and to establish traffic flow patterns which minimize or reduce vehicular emissions.

- 5. The City shall consult and coordinate with the Oregon Department of Environmental Quality to ensure that land uses and activities in Tigard comply with Federal and State air quality standards.
- 6. The City shall aim to reduce the quantity of vehicle emissions by pursuing an energy-efficient urban form which reduces the number of vehicle miles traveled, and by encouraging the use of alternate modes of transportation, especially mass transit and pedestrian.

#### 4.2 WATER QUALITY

#### <u>Findings</u>

- The quality of Tigard's surface waters are fair, inasmuch as the waters are not used for drinking purposes.
- No major point source water polluters threaten local creeks.
- Some infiltration problems exist in the sewage systems.
- Reduction of open space, removal of vegetation cover, and development which increases the
  amount of impervious surface all contribute significantly to increases in the peak flows of
  urban storm runoff entering storm sewers, creeks and drainageways.
- Offsetting measures can reduce the negative effects of urban development on water quality and quantity problems. Examples include on-site retention/ detention of storm water, inclusion of landscape buffer areas adjacent to new development and conservation and improvement of streamside vegetation along creeks and other water courses.
- Clean Water Services (CWS) is the lead agency for water quality management within Washington County.
- By intergovernmental agreement, all the cities within the Clean Water Services' service area,
   Tigard included, must follow the standards contained in CWS's Design and Construction
   Manual.

## **POLICIES**

- 4.2.1 ALL DEVELOPMENT WITHIN THE TIGARD URBAN PLANNING AREA SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND REGIONAL WATER QUALITY STANDARDS, INCLUDING THOSE CONTAINED IN THE CLEAN WATER SERVICES' DESIGN AND CONSTRUCTION MANUAL.
- 4.2.2 THE CITY SHALL RECOGNIZE AND ASSUME ITS RESPONSIBILITY FOR OPERATING, PLANNING, AND REGULATING WASTEWATER SYSTEMS AS DESIGNATED IN MSD'S METRO'S WASTE TREATMENT MANAGEMENT COMPONENT AND 208 CRAG STUDY.

- 1. In order to improve the water quality and quantity in the Tigard Area, the City shall consider developing regulations in the Tigard Community Development Code or instituting programs to:
  - a. Increase public awareness of techniques and practices private individuals can employ to help correct water quality problems;
  - b. Improve the management of industrial and commercial operations to reduce negative water quality impacts;
  - Regulate site planning for new development and construction through the Tigard Community Development Code to better control drainages and erosion and to manage storm runoff;
  - d. Increase storage and retention of storm runoff to lower and delay peak storm flows;
  - e. Reduce street related water quality and quantity problems; and
  - f. Increase public awareness concerning the use and disposal of toxic substances.
- 2. The City shall not permit industrial or other uses which violate State of Oregon water quality discharge standards.
- 3. The City shall cooperate with the Metropolitan Service District Metro and other appropriate agencies to establish practices which minimize the introduction of pollutants into ground and surface waters.
- 4. The City shall require that new developments obtain a Stormwater Connection Permit from Clean Water Services and be connected to the City's or the Unified Sewerage Agency Clean Water Services sanitary sewerage systems.

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